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EXAMINER
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ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 08/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

	Application No.	Applicant(s)
	08/939,442	Na et al
	Examiner	Art Unit
	Christopher Onuaku	2615

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ___3___ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _May 28, 2002_

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-68_ is/are pending in the applica

4a) Of the above, claim(s) _____ is/are withdrawn from considera

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-12, 17-45, 48-50, and 53-68_ is/are rejected.

7) ☒ Claim(s) _13-16, 46, 47, 51, and 52_ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirem

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b) ☐ Some* c) ☐None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-12,17-45,48-50&53-68 have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the
> United States before the invention thereof by the applicant for patent, or on an international application by
> another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before
> the invention thereof by the applicant for patent.

        The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) do not apply to the examination of this application as the application being

examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35

U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the

amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3.   Claims 1,2,22-24,26-34,58-60&62-68 are rejected under 35 U.S.C. 102(e) as being

anticipated by Saib (US 6,097,878).

Regarding claim 1, Saib discloses system and method for automatically loading

programming data of a show to be recorded without manually inputting similar data through a

timer screen, comprising:

a) the claimed input device (see Fig.3, and remote control 315; col.3, line 58 to col.4,

line 11);

b) a receiver including a "first" digital interface (see col.4, lines 28-44) for generating a

control command based on the program information received from the input device, and for

transferring the control command in an asynchronous transfer mode via the first digital interface

(see Fig.4, IRD 310 and IF 415; col.4, lines 28-44), here interface IF 415 complies with the IEEE

1394 standard, which inherently conforms to asynchronous transfer of control data, for example;

c) recording/reproducing device including a "second" digital interface for decoding the

control command transferred from the receiver, and for recording/reproducing a transport stream

being received, corresponding to the program information obtained by decoding the received

command (see Fig.3, VCR 330; Fig.4 and IF 415 connecting to other peripherals, e.g., VCR;

col.3, line 19 to col.4, 44); here the IRD 310 is enabled to connect digital input peripheral devices

such as digital VCRs, digital video disc players, etc. Therefore, the digital VCR enabled to

connect to IEEE 1394 digital interface inherently includes a decoder to decode the received

control command, which includes program information.

And, it is clear that the program information control command is not included in program

specific information (PSI) of the received program information.

Regarding claim 2, Saib further discloses wherein the input device is a remote controller (see Fig.3, remote control 315; col.3, line 58 to col.4, line 18.

Regarding claim 22, the claimed limitations of claim 22 are accommodated in the discussions of claim 1 above.

Regarding claim 23, Saib discloses the method steps, comprising:

a) parsing the program guide information from the transport stream and displaying the parsed program guide information (see col.3, lines 45-62);

b) providing the program information of the intended program according to the displayed program guide information (see col.4, line 62 to col.4, line 11).

Regarding claim 24, Saib discloses wherein the parsed program guide information is displayed on an OSD display (see Fig.4, main logic block 410 of the IRD 310 (signal processor), and the main logic block 410 includes On-screen display logic block 550, and wherein CPU 525 (Fig.5) loads a particular routine coded to control an on-screen display (OSD) logic 550 to produce the electronic guide screen; col.5, lines 46-60).

Regarding claim 26, Saib discloses a method comprising the steps providing a program number of the intended program to be recorded, transferring a command for inquiring as to whether to permit the recording of the program, receiving a response for permitting the recording

of the program from the recording device, transferring a command for performing the recording

of the program corresponding to the program number provided in the steps above, and receiving

a response for notifying of the permission of the recording of the program corresponding to the

program number, from the recording device (see col.5, lines 35 to col.6, line 58).

Regarding claim 27, the claimed limitations of claim 27 are accommodated in the

discussions of claim 23 above.

Regarding claim 28, the claimed limitations of claim 28 are accommodated in the

discussions of claim 24 above.

Regarding claim 29, the claimed limitations of claim 29 are accommodated in the

discussions of claim 24 above.

Regarding claim 30, the claimed limitations of claim 30 are accommodated in the

discussions of claim 26 above.

Regarding claims 31,32&34, the claimed limitations of claims 31,32&34 are accommodated in the discussions of claim 1 above.

Regarding claim 33, the claimed limitations of claim 33 are accommodated in the discussions of claim 2 above.

Regarding claim 58, the claimed limitations of claim 58 are accommodated in the discussions of claim 22 above.

Regarding claim 59, the claimed limitations of claim 59 are accommodated in the discussions of claim 23 above.

Regarding claim 60, the claimed limitations of claim 60 are accommodated in the discussions of claim 24 above.

Regarding claims 62&63, the claimed limitations of claims 62&63 are accommodated in the discussions of claim 26 above.

Regarding claim 64, the claimed limitations of claim 64 are accommodated in the discussions of claim 23 above.

Regarding claim 65, the claimed limitations of claim 65 are accommodated in the discussions of claim 24 above.

Regarding claim 66, the claimed limitations of claim 66 are accommodated in the discussions of claim 24 above.

Regarding claim 67, the claimed limitations of claim 67 are accommodated in the discussions of claim 30 above.

Regarding claim 68, the claimed limitations of claim 68 are accommodated in the discussions of claim 1 above, except the recording/reproducing device (see Fig.1&10A710B).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all ness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   ·   Claims 3-8,10-12,17,20,21,25,35-41,43-45,48-50,53,56,57&61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagihara et al (US 5,899,578 in view of Saib.

Regarding claim 3, Yanagihara et al disclose a device which receives and decodes digital broadcasts which includes processing performed when undecoded video data and audio data are input from an external recording/playback device, comprising:

a) the claimed input device (see Fig.1, and front panel 10; col.3, line 58 to col.4, line 4).

b) a receiver (see Fig.1) including a "first" digital interface (see digital interface 11 of Fig.1) for generating a control command based on the program information received from the input device, and for transferring the control command in an asynchronous transfer mode via the first digital interface (see col.6, line 34 to col.7, line 4 and col.10, lines 20-23);

c) recording/reproducing device (see Fig.10A&10B) including a "second" digital interface (see digital interface 36 of Fig.10A&10B) for decoding the control command transferred from the receiver, and for recording/reproducing a transport stream being received, corresponding to the program information obtained by decoding the received command (see col.10, lines 14-36);

d) the "first" and "second" digital interfaces (also see col.6., line 34 to col.7, line 12). Additionally see microcomputer 9 of Fig.1 (the "first" signal processor) in col.5, line 34 to col.7, line 19); "second" signal processor (see digital interface 36 and multiplexer 24 of Fig.10A; col. 10, lines 24-36).

Yanagihara fails to disclose wherein the control command is not included in program specific information (PSI) of the transport stream.

As discussed in claim 1 above, Saib discloses wherein the program information control

command is not included in program specific information (PSI) of the received program

information.

Providing control command which is not included in program specific information (PSI)

of a transport stream provides the desirable advantage of directly controlling the electronic

device, which simplifies the control process. It would have been obvious to modify Yanagihara

by realizing Yanagihara with the means to transfer a control command to control an electronic

device wherein the control command is not included in program specific (PSI) of a transport

stream, as taught by Saib, since this provides the desirable advantage of directly controlling an

electronic device, which simplifies the control process.

Regarding claim 4, Saib further teaches wherein the input device is a remote controller

(see col.5, line 64 to col.6, line 6).

Regarding claim 5, the processor of Yanagihara, which is also a receiver, is connected to

DVCR of Fig.10 of Yanagihara through a digital interface (see claim 1 discussion). With

Yanagihara now modified with the remote controller of Haroun it would have been obvious that

Yanagihara would then be controlled by the remote control device of Haroun, when the remote

control device is used as an input device.

Regarding claim 6, Yanagihara discloses wherein the "first" digital interface generates the

program number control command based on parsed PSI (see col.4, lines 48-53; and col.5, line 60

to col.7, line 62).

Regarding claim 7, Yanagihara discloses wherein the "first" and "second" digital

interfaces are each an IEEE 1394 interface (see col.6, line 63 to col.7, line 4; col.10, lines 14-

19).

Regarding claim 8, Yanagihara discloses wherein the "first" digital interface transfers the

transport stream as isochronous packets during an isochronous transfer "mode", and transfers the

program number as asynchronous packets during an asynchronous transfer "mode" using "

control command set"(see col.6, line 63 to col.7, line 4 and col.8, lines 9-18 and col.10, lines 24-

51).

Regarding claim 10, Yanagihara. discloses wherein the "first" digital interface transfers a

multi-program transport stream isochronous packets in an isochronous transfer "mode" (see

col.6, line 63 to col.7, line 4), and the "second" digital interface transfers a "single program"

(packet) transport stream as isochronous packets in the isochronous transfer mode during a

playback "mode" (see col.7, lines 5-12). Here the DVCR has a digital interface 36 ("second"

digital interface) of Fig.10A.

Regarding claim 11, Yanagihara discloses wherein the "first" digital interface transfers a

multi-program transport stream isochronous packets in an isochronous transfer "mode" (see

claims 8&10 discussions), and the "second" digital interface transfers a "multi- program"

transport stream as isochronous packets in the isochronous transfer mode during a playback

"mode" (see claims 8&10). Both digital interface of Fig.1 and digital interface 36 of the DVCR

of Fig.10A&10B have the same construction (see col.10, lines 20-24), and both conform to the

IEEE-1394 standard and can transfer multi-program or single-program transport stream

isochronously.

Regarding claim 12, Yanagihara discloses wherein the "first" digital interface transfers a

single program transport stream isochronous packets in an isochronous transfer "mode"and the

"second" digital interface transfers a "single program" transport stream as isochronous packets in

the isochronous transfer mode during a playback "mode"(see claims 8,10&11 discussions

above).

Regarding claim 17, Yanagihara fails to explicitly disclose wherein the first signal

processor further comprises an on-screen graphic (OSG) generator for displaying the program

guide information of a transport stream being received on an OSG display.

Saib further teaches in Fig.4 main logic block 410 of the IRD 310 (signal processor), and

the main logic block 410 includes On-screen display logic block 550, and wherein CPU 525

(fig.5) loads a particular routine coded to control an on-screen display (OSD) logic 550 to produce the electronic guide screen (see Fig.4&5, col.5, lines 46-60. Adding on-screen generator for displaying program guide information to an electronic program guide system provides the desirable advantage of displaying program guide information, which, for example, facilitates the user selection of program the user wishes to view or record.

It would have been obvious to modify Yanagihara by adding on-screen generator for displaying program guide information, as taught by Saib, since this provides the desirable advantage of displaying program guide information, which, for example, facilitates the user selection of program the user wishes to view or record.

Regarding claim 20, the claimed limitations of claim 20 are accommodated in the discussions of claim 17 above.

Regarding claim 21, Yanagihara and Saib fail to explicitly disclose wherein the second signal processor does not parse the program guide information from a transport stream being received via the second digital interface, but this would have been an obvious engineering design consideration depending on the circuit at hand.

Regarding claim 25, Yanagihara discloses the method comprising the steps of transferring a "command" for inquiring whether to permit the transfer of the program number of the program recorded in the recording medium, from the receiver to the recording/reproducing device, during a playback mode, and receiving the program number of the program recorded in the recording medium, from the recording/reproducing device (see col.4, lines 5-46; and col.6, lines 34-67).

Regarding claim 35, the claimed limitations of claim 35 are accommodated in the discussions of claim 3 above.

Regarding claim 36, Yanagihara discloses wherein an input device for inputting the program number of an intended program (see Fig.1, front panel 10; col.3, line 58 to col.4, line 4).

Regarding claim 37, the claimed limitations of claim 37 are accommodated in the discussions of claim 2 above.

Regarding claim 38, the claimed limitations of claim 38 are accommodated in the discussions of claim 5 above.

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Regarding claim 39, the claimed limitations of claim 39 are accommodated in the discussions of claim 6 above.

Regarding claim 40, the claimed limitations of claim 40 are accommodated in the discussions of claim 7 above.

Regarding claim 41, the claimed limitations of claim 41 are accommodated in the discussions of claim 8 above.

Regarding claims 43&44, the claimed limitations of claims 43&44 are accommodated in the discussions of claim 10 above.

Regarding claim 45, the claimed limitations of claim 45 are accommodated in the discussions of claim 12 above.

Regarding claim 48, the claimed limitations of claim 48 are accommodated in the discussions of claim 3 above.

Regarding claim 49, the claimed limitations of claim 49 are accommodated in the discussions of claim 12 above.

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Regarding claim 50, the claimed limitations of claim 50 are accommodated in the discussions of claim 7 above.

Regarding claim 53, the claimed limitations of claim 53 are accommodated in the discussions of claim 17 above.

Regarding claim 56, the claimed limitations of claim 56 are accommodated in the discussions of claim 17 above.

Regarding claim 57, the claimed limitations of claim 57 are accommodated in the discussions of claim 21 above.

Regarding claim 60, the claimed limitations of claim 60 are accommodated in the discussions of claim 24 above.

Regarding claim 61, the claimed limitations of claim 61 are accommodated in the discussions of claim 25 above.

6.   Claims 9&42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagihara

et al in view of Saib and further in view of Couts (US 5,742,730).

Regarding claim 9, Yanagihara and Saib fail to disclose wherein the control command set

is an audio/video control command and transaction set (AV/C CTS). Couts teaches a control

system for rapidly and accurately positioning consumer-type VCRs to arbitrarily selected tape

positions comprising wherein the "control command set" is an "audio/video control command

and transaction set" (AV/C CTS) (see col.9, lines 43-61).

It would have been obvious further modify Yanagihara by adding the audio/video control

command and transaction set" (AV/C CTS of Couts, in order that Yanagihara would conform to

the AV/C CTS standard.

Regarding claim 42, the claimed limitations of claim 42 are accommodated in the

discussions of claim 9 above.

7.   Claims 18,19,54&55 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Yanagihara et al in view of Saib and further in view of Fujii et al (US 5,966,385).

Regarding claim 18, Yanagihara and Saib fail to explicitly disclose wherein the OSG

generator mixes the program guide information with a graphic signal of a background screen to

be provided to the OSG display.

Fujii et al teach a receiver/decoder for receiving video and audio data compression

encoded by high efficiency coding means and decoding the received encoded data, wherein when

a specific information (SI) data is analyzed, if the data is program guide information, the OSD

data is generated from this information and sent to the OSD processor 206 via the bus. The OSD

processor 206 processes the OSD data 'f' and sends it to the video decoder 207 in

synchronization with a sync 'q' of the video data decoded by the video decoder 207. In this

manner, the program guide is displayed, for example, overlaid on the decoded video data (see

Fig.17, col.13, lines 7-14), here examiner reads the decoded video data as the graphics signal of a

background screen. Mixing the program guide information with a graphic signal of a background

screen to be provided to the OSG display provides the desirable advantage of, for example,

displaying the program guide information and the graphic signal simultaneously, thereby

facilitating the user program selection operation, by the comparison of the program guide

information with graphic signal.

It would have been obvious to further modify Yanagihara by realizing Yanagihara with

the means to display the program guide overlaid (mixed with) on a video data, as taught by Fujii,

since this provides the desirable advantage of, for example, displaying the program guide

information and the graphic signal simultaneously, thereby facilitating the user program selection

operation, by the comparison of the program guide information with graphic signal.

Regarding claim 19, the claimed limitations of claim 19 are accommodated in the discussions of claim 18 above.

Regarding claim 54, the claimed limitations of claim 54 are accommodated in the discussions of claim 18 above.

Regarding claim 55, the claimed limitations of claim 55 are accommodated in the discussions of claim 18 above.

Allowable Subject Matter

8.   Claims 13-16,46-47,51&52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9.   The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 13, the prior art of record fails to show or fairly suggest a multi-media system comprising a first and second digital interfaces, each of which is an IEEE 1394 interface where the multimedia system further comprises wherein the first digital interface comprises a first microcomputer including a transaction layer and a serial bus management layer, as software,

for generating the program information control command based on the program information received from the input device, using a write transaction and a read transaction, a first link layer for adding an asynchronous header to the program information control command received from the first microcomputer to convert the program information control command into serial data, and a first physical layer for converting the serial data into an electrical signal.

Regarding claim 46, the prior art of record fails to show or fairly suggest a digital Audio/video device having a receiver for receiving a transport stream comprising a signal processor, a digital interface, an input device, the receiver is connected to at least one recording/reproducing device using the digital interface and the receiver and the recording/reproducing device are controlled by the input device, where the A/V device further comprises wherein the digital interface comprises a first microcomputer including a transaction layer and a serial bus management layer, as software, for generating the program information control command based on the program information input via the input device, using a write transaction and a read transaction, a first link layer for adding an asynchronous header to the control command generated by the first microcomputer to convert the control command into serial data, and a first physical layer for converting the control command serial data into an electrical signal.

Regarding claim 51, the prior art of record fails to show or fairly suggest a digital

audio/video recording/reproducing device for recording/reproducing a transport stream

transferred from a digital A/V device, the recording/reproducing device comprising a digital

interfaces, and a signal processor, and the digital interface comprises an IEEE 1394 interface

where the digital A/V recording/reproducing device further comprises wherein the digital

interface comprises a second physical layer for converting the program information command

electrical signal, transferred from the first physical layer, into digital data, a second link layer for

converting the program information command digital data into parallel data, and for removing

the asynchronous header, and a second microcomputer including a transaction layer and a serial

bus management layer, as software, for recording the program information on a predetermined

region of a recording medium by recognizing the program information command during a

recording mode, and for reading out the program information recorded in the predetermined

region during a playback mode

<div align="center">

Conclusion

</div>

10.   Any inquiry concerning this communication or earlier communications from this

examiner should be directed to Christopher Onuaku whose telephone number is (703) 308-7555.

The examiner can normally be reached on Tuesday to Thursday from 7:30 am to 5:00 pm. The

examiner can also be reached on alternate Monday.

Art Unit:

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor,

Andrew B. Christensen, can be reached on (703) 308-9644.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

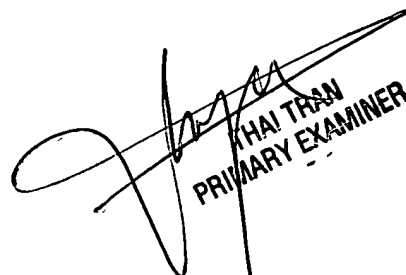(703) 872-9314, (for formal communications intended for entry)

and (for informal or draft communications, please label "PROPOSED" or

"DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be direct

to Customer Service whose telephone is (703) 306-0377.

8/2/02

KHAI TRAN
PRIMARY EXAMINER